06-20-03 #19/Appeal Brief 3626 $

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Petitioner's Docket No. FERN-P006

OIPE JC102 JUN 19 2003 PATENT & TRADEMARK OFFICE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Dennis Sunga Fernandez

Application No.: 09/435,504 Art Unit: 3626

Filed: 11/06/1999 Examiner: Morgan, Robert W.

For: BIOINFORMATIC TRANSACTION SCHEME

TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLCIATION – 37 C.F.R. § 1.192)

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on **6/18/2003**.

2. STATUS OF APPLICANT

RECEIVED
JUN 24 2003
GROUP 3600

This application is on behalf of

[ ] other than a small entity

[x] small entity

A statement:

[ ] is attached.

[x] was already filed.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. 1.17 (c), the fee for filing the Appeal Brief is:

[x] small entity

$160.00

[ ] other than a small entity

$320.00

Pursuant to 37 C.F.R. 1.17 (d), the fee for request for Oral Hearing is:

[ ] small entity

$140.00

[ ] other than a small entity

$280.00

Appeal Brief fee due $ 160.00

4. EXTENSION OF TERM

The proceedings herein are for a patent application and the provisions of 37 C.F.R. §1.136 apply.

(a) [ ] Applicant petitions for an extension of time under 37 C.F.R. §1.136 (fees: 37 C.F.R. § 1.17 (a) (1)-(5)) for the total number of months checked below:

	Extension (months)	Fee for other than small entity	Fee for small entity
[ ]	one month	$110.00	$55.00
[ ]	two months	$410.00	$205.00
[ ]	three months	$930.00	$465.00
[ ]	four months	$1,450.00	$725.00
[ ]	five months	$1,970.00	$985.00

Fee: $_____

If an additional extension of time is required, please consider this petition thereof.

[ ] An extension for _____ months has already been secured, and the fee paid therefore of $ _____ is deducted from the total fee due for the total months of extension is now requested.

Extension fee due with this request $ _____

or

(b) [x] Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal Brief Fee $ 160.00

Extension Fee (if any) $ _____.

6. FEE PAYMENT

[x] Attached is check No. 935 in the sum of $ 160.00. However, in case Applicant inadvertently miscalculated any required fee, the Commissioner is hereby authorized to charge the necessary additional amount associated with this communication or credit any overpayment to **Deposit Account No. 500482.** A duplicate copy of this authorization is enclosed.

[ ] Charge Account No. **500482** the sum of $ _____.
A duplicate of this transmittal is attached.

7. FEE DEFICIENCY

[x] If any additional extension and/or fee is required, this is a request therefore and to charge Account No. 500482 .

AND/OR

[ ] If any additional fee for claims is required, charge Account No. _____.

Respectfully submitted,

6/18/03
Date

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PATENT TRADEMARK OFFICE

Attorney Docket No. FERN-P006 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:
DENNIS SUNGA FERNANDEZ

Application No.:
09/435,504

Filed: 11/06/1999

For: BIOINFORMATIC
TRANSACTION SCHEME

Examiner: Morgan, Robert W.

Art Unit: 3626

Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

Appellant hereby submits, in triplicate, the following Brief pursuant to 37 CFR 1.192 in support of an appeal from a final action dated March 14, 2003 which rejected all claims, as well as an advisory action dated May 8, 2003 which maintained such final rejection; Appellant filed Notice of Appeal on May 21, 2003. Appellant respectfully requests consideration of this appeal by the Board of Patent Appeals and Interferences for allowance of the case.

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I. REAL PARTY IN INTEREST

The real party in interest is Dennis Sunga Fernandez, an individual, having a principal place of business at 1047 El Camino Real, Suite 201, Menlo Park, CA 94025. He is also the U.S. Patent Attorney prosecuting this appeal.

II. RELATED APPEAL AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision.

III. STATUS OF CLAIMS

Claims 1-12 and 21-28 are currently pending, and each claim stands rejected and entered by the Examiner for purposes of appeal.

Claims 1, 27 and 28 are independent.

Claims 1, 5, 7, 8, 11, 12, 21-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. (US Pat. 6,366,682) and O'Flaherty et al. (US Pat. 6,275,824).

Claims 2-4, 6, 9, 10 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al., O'Flaherty et al. and Beecham (US Pat. 5,876,926).

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman et al., O'Flaherty et al., Beecham and Rigault et al. (US Pat. 6,389,428).

IV. STATUS OF AMENDMENTS

All claims 1-12 and 21-28 on appeal are provided in the Appendix, as last-modified via Supplemental Amendment filed on January 6, 2003.

V. SUMMARY OF INVENTION

The invention is a method that uses a bioinformatic value in user transactions, the bioinformatic value in particular being determined according to a voluntarily-selected portion of the user's personal genetic nucleotide profile. The transaction occurs automatically when the user permits access to a certain portion of his or her personal genetic nucleotide profile, while an unvolunteered portion of the user's profile remains inaccessible to determine the bioinformatic value in the transaction.

VI. ISSUES

An issue presented in this appeal is whether claims 1, 5, 7, 8, 11, 12, 21-25 and 27 are rendered unpatentable in view of Hoffman et al. and O'Flaherty et al.

Another issue presented in this appeal is whether claims 2-4, 6, 9, 10 and 28 are rendered unpatentable over Hoffman et al., O'Flaherty et al., and Beecham.

Yet another issue presented in this appeal is whether claim 26 is rendered unpatentable over Hoffman et al., O'Flaherty et al., Beecham and Rigault et al.

More specifically, the following issues are presented in this appeal:

- Whether Hoffman et al. teaches or renders obvious using personal genetic nucleotide profile to evaluate an automatic transaction method.

- Whether it would have been obvious to combine the system of Hoffman et al. with that of O'Flaherty et al. to provide a transaction method where a volunteered portion of a user's personal genetic nucleotide profile is used automatically to evaluate the user's transaction.
- Whether Beecham teaches away from a person voluntarily permitting access to a select portion of his or her personal genetic nucleotide profile for use in evaluating a transaction with the person.

VII. GROUPING OF CLAIMS

In this appeal, all claims 1-12 and 21-28 are grouped together as Group I.

VIII. ARGUMENT

A. OVERVIEW OF PRIOR ART USED IN THE REJECTION

The Final Rejection, which is the subject of this appeal, is based on 35 U.S.C. 103(a) rejections using the references of Hoffman et al., O'Flaherty et al., Beecham and Rigault et al., which are discussed briefly as follow:

Hoffman et al.

Hoffman et al. describes a transaction system that reduces customer fraud by eliminating the use of tokens, such as credit and debit cards, which are vulnerable to being stolen. This token-less system verifies the identity of a buyer by comparing the

buyer's "biometric sample" with other pre-stored biometric samples, specifically fingerprints, voice input, palm print, or retinal information (Abstract; and column 9, lines 31-32.) Additionally, such buyer-identification approach improves accuracy by comparing a biometric sample "from among a basket of other biometrics, the basket being a subset of all stored biometrics in the system" (column 5, lines 61-64.)

Hoffman et al., however, fails to describe or suggest using any portion of personal genetic nucleotide profile as a biometric sample. This is because Hoffman et al. never contemplated the need to evaluate any gene or nucleotide information, let alone using a select portion of genetic nucleotide profile in an automatic transaction method. Instead to provide a speedier system to secure financial transactions, Hoffman et al. merely uses non-genetic, biometric input device 12, such as a "fingerprint scanner, voice input device (microphone), palm print scanner, retinal scanner or the like" to identify buyers (column 9, lines 28-33.)

O'Flaherty et al.

O'Flaherty et al. describes a database management system for accessing data controllably, in particular by using parameters, such as a global data control column or opt-in/out flag, to indicate privacy preferences (column 7, lines 10-35.) O'Flaherty et al. uses privacy control parameters specifically to restrict access to personal consumer information, namely demographic data, preference data, age, gender, hiking interest, and shoe brand preference (column 10, lines 21-23.) O'Flaherty et al., however, does not describe or suggest accessing any genetic or nucleotide information, let alone a select portion of a user's personal genetic nucleotide profile. This is because O'Flaherty et al.

never contemplated a system for providing privacy preferences to genetic information, only personal consumer or marketing information.

Beecham

Beecham describes a human medical data system for collecting and evaluating biological samples, i.e., genetic data from test subjects. Since genetic test data may reveal disease, or susceptibility thereto, Beecham provides a system for handling such data anonymously.

Further citing well-known governmental and private concerns regarding ramifications that may arise from disclosing personal test results, Beecham actually warns against disclosure or use of genetic test data in various industry transactions; in particular, Beecham specifically identifies certain risks of "discriminat[ion] against some people in certain settings, e.g., in the making of hiring and downsizing decisions, in permitting the individual to obtain health insurance and the like" (Abstract; column 5, lines 27-44.)

Moreover, despite considering the possibility of future governmental regulation which may offer some protection from discrimination based on genetic predisposition, Beecham still fears and recognizes a real need, nonetheless, to keep genetic test data private, especially "by allowing test results to be viewed only when the patient to whom the results are pertinent provides a biometric identification."

Beecham thus provides an anonymous medical data system, being motivated clearly by "the need for individuals to know their own genetic predisposition and medical personnel to watch for and screen for any such disease." Accordingly Beecham

guardedly discourages against any disclosure or use of genetic test data in non-medical, non-private transactions generally, and more particularly in a novel transaction method where a person may voluntarily permit access, even to a select portion of his or her personal genetic nucleotide profile for use deliberately in evaluating personal transactions automatically according to private genetic information (column 18, lines 30-56.)

Rigault et al.

Rigault et al. describes a computer system for storing biomolecular sequence information, including, among other things, single nucleotide polymorphism (column 17, lines 66-67.) However, Rigault et al. neither discloses nor suggests using personal genetic nucleotide profile, particularly single nucleotide polymorphism associated with a user, in an automated transaction method with such user. This is because Rigault et al. merely teaches a storage system for rapidly retrieving large amounts of information, but without suggesting any automated transaction method (Background, columns 1-2.)

B. THE EXAMINER FAILS TO ESTABLISH A *PRIMA FACIE* CASE OF OBVIOUSNESS

According to MPEP 7602.02, to establish a *prima facie* case of obviousness, a prior art reference (or references when combined) must teach or suggest all the claim limitations. Thus, the examiner bears a burden of establishing a *prima facie* case of obviousness; and when the references cited by the examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned. *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995). Furthermore when the prior art references

teach all the limitations of a patent's claim except one specific feature, an obviousness challenge to the patent's validity shall be rejected. *WMS Gaming Inc. v. International Game Technology,* 184 F.3d 1339, 51 USPQ2d 1385 (Fed. Cir. 1999).

Rejection of claims 1, 5, 7, 8, 11, 12, 21-25 and 27 under 35 U.S.C. 103(a) over Hoffman et al. and O'Flaherty et al.

In this rejection, the examiner cites the Hoffman et al. and O'Flaherty et al. references, particularly relying on Hoffman et al. to teach the limitation of "personal genetic nucleotide profile." This claim limitation is specified essentially by independent claims 1 and 27, as well as dependent claims 5, 7, 8, 11, 12, and 21-25, each depending on claim 1. In the Final Office Action, the examiner presents argument that certain "biometric sample" mentioned by Hoffman et al. also reads on "personal genetic nucleotide profile."

Appellant respectfully disagrees, however, with the examiner's interpretation of the Hoffman et al. reference, and hereby submits that Hoffman et al., in fact, does not teach or suggest any "personal genetic nucleotide profile." The "biometric sample" referred to in the Hoffman et al. reference merely pertains to a buyer's fingerprints, voice input, palm print, or retinal information, which Hoffman et al. would use to secure buyer identification. Clearly Hoffman et al.'s biometric sample was never contemplated to include any genetic profile or other personal nucleotide information.

Rejection of claims 2-4, 6, 9, 10 and 28 under 35 U.S.C. 103(a) over Hoffman et al., O'Flaherty et al. and Beecham.

In this rejection, the examiner cites the Hoffman et al., O'Flaherty et al., and Beecham references, again relying on Hoffman et al. to teach the limitation of "personal genetic nucleotide profile." This claim limitation is specified essentially by independent claims 1 and 28, as well as dependent claims 2-4, 6, 9 and 10, each depending on claim 1.

Substantially for the same reasons articulated above, Appellant submits that the specific feature of "personal genetic nucleotide profile" is not taught or suggested by Hoffman et al., or O'Flaherty et al. Additionally in the Advisory Action, the examiner in fact admits explicitly that the Beecham reference, which proposes a system for keeping genetic test data private, was never relied on for the feature of voluntary selection by a user to access "personal genetic nucleotide profile," but instead relied only on the teachings of O'Flaherty and Hoffman for this specific claimed feature.

Rejection of claim 26 under 35 U.S.C. 103(a) over Hoffman et al., O'Flaherty et al., Beecham and Rigault et al.

In this rejection, the examiner cites the Hoffman et al., O'Flaherty et al., Beecham, and Rigault et al. references, once again by relying on Hoffman et al. to teach the limitation of "personal genetic nucleotide profile" as used to evaluate an automated transaction method. This claim limitation is specified essentially by independent claim 1, as well as claim 26, which is dependent thereon.

Again for the same reasons presented above, Appellant submits that the specific feature of "personal genetic nucleotide profile" is not taught or suggested by Hoffman et al., O'Flaherty et al., Beecham, or Rigault et al. In particular, the Rigault et al. reference merely teaches a system for retrieving biomolecular data, such as single nucleotide polymorphisms, but this reference also does not teach or suggest using "personal genetic nucleotide profile" as used to evaluate an automated transaction method.

Therefore because the references cited by the examiner do not teach or suggest all of the claimed limitations, Appellant submits that the examiner fails to establish a *prima facie* case of obviousness.

C. THERE IS NO SUGGESTION OR MOTIVATION TO COMBINE THE PRIOR ART REFERENCES

When a patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination. *Northern Telecom Inc. v. Datapoint Corp.,* 908 F.2d 931, 15 USPQ2d (Fed. Cir. 1990), *cert. denied,* 298 U.S. 920 (1990); and for the claimed subject matter to be obvious in view of a combination of prior art references, the prior art must suggest the combination to one of ordinary skill in the art and reveal that one of such skill would have a reasonable expectation of success in carrying out the invention. *In re Vaeck,* 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

More importantly the showing of a suggestion, teaching, or motivation to combine prior teachings must be clear and particular. *In re Dembiczak,* 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). And if a reference disclosure is directed to a different purpose, the inventor would accordingly have had less motivation or occasion to consider it. *In re Clay,* 966 F.2d 656, 23 USPQ2d 1058 (Fed. Cir. 1992).

Rejection of claims 1, 5, 7, 8, 11, 12, 21-25 and 27 under 35 U.S.C. 103(a) over Hoffman et al. and O'Flaherty et al.

In this rejection, the examiner attempts to combine the Hoffman et al. and O'Flaherty et al. references by relying on "motivation of protecting the rights of individuals regarding data abuse by those in control of an individual's stored information" (Final Office Action, page 4, lines 6-7.)

Thus for the purpose of protecting data privacy, the examiner refers to the O'Flaherty et al. reference (column 2, lines 41-47,) which suggests only in general that "... when personal information is stored in data warehouses, it is incumbent on those that control this data to protect the data from such abuse ... the rights of individuals regarding use of data pertaining to them have become of greater importance."

The examiner fails, however, to show clearly or particularly any specific suggestion or motivation to combine the private data system of O'Flaherty et al. with the token-less transaction system of Hoffman et al., whose different purpose, on the other hand, is to provide an easy, efficient, and convenient consumer transaction system (column 6, lines 21-46.)

Rejection of claims 2-4, 6, 9, 10 and 28 under 35 U.S.C. 103(a) over Hoffman et al., O'Flaherty et al. and Beecham.

In this rejection, the examiner attempts to combine the Hoffman et al., O'Flaherty et al., and Beecham references by relying on "motivation of preventing discrimination against people in the workplace and obtaining health insurance" (Final Office Action, page 10, lines 19-20.) In support for such motivation the examiner refers to general discussion in the Beecham reference about related public issues (column 5, lines 40-45.)

But there is no clear or particular showing by the examiner of any specific suggestion or motivation to combine Beecham's medical system for anonymous genetic data handling with the separate systems of O'Flaherty et al. and Hoffman et al., neither of which teaches, suggests, or is motivated by any insurance-related purpose.

Rejection of claim 26 under 35 U.S.C. 103(a) over Hoffman et al., O'Flaherty et al., Beecham and Rigault et al.

In this rejection, the examiner attempts to combine the Hoffman et al., O'Flaherty et al., Beecham, and Rigault et al. references by relying on "motivation of providing a way to store and associate mapping information with clones and clusters" (Final Office Action, page 17, lines 8-10.) Here for support the examiner refers to specification language in the Rigault et al. reference (column 17, lines 25-26.)

However the examiner does not show any clear or particular suggestion or motivation for combining Rigault et al.'s data storage system with the different systems of Hoffman et al., O'Flaherty et al., and Beecham, none of which teaches, suggests, or is motivated by any purpose related to storing or mapping information with clones and clusters.

Appellant submits that the prior art references cited by the examiner fail to provide any clear or particular teaching, suggestion, or motivation to be combined as attempted by the examiner. Significantly where the examiner proposes apparent motivation to combine the various prior art references as discussed above, each of such proposed motivation in fact is directed to a different purpose than that which applies to each other cited reference.

Accordingly Appellant submits that the examiner may not properly combine the cited prior art references to reject the claimed invention, because such references do not reveal any suggestion or motivation to combine what one of ordinary skill would consider to have a reasonable expectation of success in carrying out the invention. One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine,* 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover prior art may not be gathered with the claimed invention in mind. *Pentec Inc. v. Graphic Controls Corp.,* 776 F.2d 309, 227 USPQ 766 (Fed. Cir. 1985).

D. PRIOR ART REFERENCE TEACHES AWAY FROM THE INVENTION

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley,* 27 F.3d 551, 31 USPQ2d 1130 (Fed. Cir. 1994). Also if a first prior art reference did in fact teach away from a second reference, then that finding alone can defeat an obviousness claim based on a combination of the two references. *Winner International Royalty Corp. v. Wang,* 202 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir. 2000). Finally that the inventor achieved the claimed invention by doing what those skilled in the art suggested should not be done is a fact strongly probative of nonobviousness. *Kloster Speedsteel AB v. Crucible Inc.,* 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986), *on rehearing,* 231 USPQ 160 (Fed. Cir. 1986).

Appellant submits that the Beecham reference, which is cited by the examiner together with other references to reject several claims herein, teaches away from the invention. More particularly Appellant submits that the Beecham reference, which teaches a data system for processing genetic test data anonymously, specifically raises certain concerns that discourage individuals from disclosing personal genetic information, especially for certain transactions such as evaluating employment candidates and insurance applicants.

Yet in the Advisory Action the examiner argues nonetheless that the Beecham reference "encourages" individuals to reveal or permit access to genetic test data. In

support of such argument, the examiner refers to the following paragraph in the Beecham reference (column 18, lines 30-46):

> It will also be appreciated that in some settings, a doctor may wish to be able to store medical information in such a fashion that it can only be recalled by the patient. For example, with genetic testing for various disorders and abnormalities, there may be concern that these data, if made available or seized from the doctor, could be used to discriminate against the individual. Some fear that if the genetic test results were known to industry, discrimination may occur against individuals with genetic predisposition to disease. Governmental and private concern for implications of a positive genetic test result, as for example for BRCA1, are well known. For further example, President Clinton indicated recently that a law would be proposed that makes it illegal for an insurance company to restrict coverage where a person has a genetic test result indicating possible future disease is likely.

Appellant respectfully disagrees with the examiner's interpretation of the Beecham reference. In fact in the next paragraph of the Beecham reference, it is clear that Beecham consistently discourages against disclosure of private genetic information, even when government regulation may offer protection from discrimination (column 18, lines 47-56, emphasis added):

> The need for individuals to know their own genetic predisposition and medical personal to watch for and screen for any such disease development is key. Despite potential governmental regulations which offer protection from discrimination based on genetic predisposition, a means for allowing medical care while keeping test results private is seen. The invention disclosed herein is one method and system that can accomplish this by only allowing the test results to be viewed when the patient to whom the results are pertinent provides a biometric identification.

Accordingly appellant submits that a person of ordinary skill upon reading the Beecham reference would be led not to disclose any portion of private genetic information in an automated transaction method, which is a direction that is divergent from the path taken by the claimed invention. In comparison Appellant's invention

requires a user to permit access voluntarily to a select portion of his or her personal genetic nucleotide profile, while an unvolunteered portion of the personal genetic nucleotide profile remains inaccessible to determine a bioinformatic value in the automated transaction method.

Significantly the subject matter as a whole of appellant's invention for an automated transaction method resides in both disclosing a select portion of a user's personal genetic nucleotide profile (because the user is motivated to reveal only genetic information that may be beneficial to him or her in a particular transaction,) and not disclosing other portions of the user's personal genetic nucleotide profile (because the user may fear being disadvantaged in the transaction upon revealing any unfavorable genetic information.)

Appellant therefore submits that because the Beecham reference discourages against any disclosure of private genetic information, this reference in fact teaches away from the claimed invention, which subject matter as a whole requires selective disclosure and nondisclosure of genetic information as part of an automated transaction method. Validity is determined on the basis of the subject matter of a claim as a whole. *Panduit Corp. v. Dennison Mfg. Co.,* 774 F.2d 1082, 227 USPQ 337 (Fed. Cir. 1985), *remanded,* 475 U.S. 809, 106 S. Ct. 1578, 229 USPQ 478 (1986), *on remand,* 810 F.2d 1561, 1 USPQ2d 1593 (Fed. Cir. 1987), *cert. denied,* 481U.S. 1052 (1987).

IX. CONCLUSION

Appellant submits that the applicable rejections under 35 U.S.C. 103(a) have been overcome, and hence all claims in Group-I are in condition for allowance.

If there are additional charges not accounted for herein, please charge them to Deposit Account No. 500482.

Respectfully Submitted,

FERNANDEZ & ASSOCIATES, LLP

Date: JUNE 18, 2003

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X. APPENDIX

Claims Presented For Appeal
(as last-modified via 1/6/2003 Supplemental Amendment)

1. Automated transaction method comprising the steps of:

determining electronically a bioinformatic value associated with a user; and

transacting via a processor with the user according to the bioinformatic value,

wherein the bioinformatic value is automatically determined when or after the user permits access to a voluntarily-selected portion of his or her personal genetic nucleotide profile, such accessible portion being associated or used with evaluating the user transaction via said processor, an other portion of such genetic profile being not voluntarily-selected by the user and thereby inaccessible for evaluating the user transaction.

2. The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based medical or physiological condition, wherein the transaction step comprises providing the user with an insurance policy to cover the occurrence of the genetically-based condition.

3. The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based mental or emotional condition, wherein the transaction step comprises providing the user with a service contract in contemplation of the occurrence of the genetically-based condition.

4. The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based condition, wherein the transaction step comprises providing the user with a promotional offer or bid to serve the genetically-based condition.

5. The method of Claim 1 wherein:

the bioinformatic value comprises a classification of the user according to a user-authorized mask, such mask comprising a subset of a genetic sequence associated with the user.

6. The method of Claim 1 wherein:

the bioinformatic value comprises a likelihood or risk of the user having or developing a genetically-based condition based on a statistical or actuarial table and a genetic or heredity profile associated with the user.

7. The method of Claim 1 wherein:

the bioinformatic value is processed for transaction with the user according to a rule set that is applicable to a plurality of users in a temporal or jurisdictional grouping on a non-discriminatory basis.

8. The method of Claim 1 further comprising the steps of:

determining electronically an other bioinformatic value associated with the user; and

modifying the transaction with the user according to the other bioinformatic value.

9. The method of Claim 8 wherein:

the other bioinformatic value comprises an increase or decrease of likelihood or risk of the user having or developing the genetically-based condition.

10. The method of Claim 1 wherein:

the bioinformatic value is determined by a server in a network, and the bioinformatic value is stored confidentially in a database associated with the server, the server transacting remotely with the user through the network to enable a medical service for the user.

11. The method of Claim 1 wherein:

the bioinformatic value is associated with an other user, and the transaction according to the bioinformatic value occurs separately with both users on a confidential and non-discriminatory basis.

12. The method of Claim 1 wherein:

the bioinformatic value is authentically generated by a portable user device, the transaction updating a user account, which is accessible by the user device.

21. The method of Claim 1 wherein:

the bioinformatic value or the genetic nucleotide profile is represented in a data structure that may be provided in a modulated electronic signal.

22. The method of Claim 1 wherein:

the user transaction comprises a plurality of offers to the user for transacting competitively according to the bioinformatic value.

23. The method of Claim 1 wherein:

the bioinformatic value determination generates an alert or report indicating a fraudulent or identical genetic nucleotide profile or state.

24. The method of Claim 1 wherein:

the bioinformatic value determination generates a discrimination indication or alert when comparing bioinformatic values associated with a plurality of users.

25. The method of Claim 1 wherein:

the bioinformatic value is determined using a signal generated electronically by a biometric or bioinformatic sensor for determining a personal genetic sequence of the user.

26. The method of Claim 1 wherein:

the bioinformatic value or the genetic nucleotide profile corresponds effectively with a single nucleotide polymorphism (SNP) associated with the user.

27. Automated transaction method comprising the steps of:

permitting by a user access to a voluntarily-selected portion of a personal genetic nucleotide profile of the user, such accessible portion being used to determine electronically a bioinformatic value associated with the user, an other portion of such genetic nucleotide profile being not voluntarily-selected by the user and thereby inaccessible for determining the bioinformatic value; and

transacting via a processor by the user according to the determined bioinformatic value.

28. Automated transaction method comprising the steps of:

determining electronically by a care-giver a bioinformatic value associated with a user, the user permitting access to a voluntarily-selected portion of a personal genetic nucleotide profile of the user, such accessible portion being used to determine the bioinformatic value associated with the user, an other portion of such genetic nucleotide profile being not voluntarily-selected by the user and thereby inaccessible for determining the bioinformatic value; and

transacting via a processor with the user a healthcare service according to the determined bioinformatic value.

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